

RW 2361

RWS Londen 26 Jan 2004

Patent Engineer: HAAN, P.E. DE - IP&S-NL Received: 22 Dec 2003

Title: FAILSAFE PRINCIPLE: A FAILING CLOCK SOURCE IN AN

ASYNCHRONOU

Search criteria:

An International Novelty Search was conducted in respect of an asynchronous method for handling a failing clock in an electronic system. A clock source is used that has a status output that shows the status if the oscillator is running. This output is connected to an interrupt request of the microcontroller, which can then detect an error condition. This will start a software routine that handles code related to a failing clock source without the need of the clock source

| Very Relevant Documents (* indicates a Philips patent/application) | relevant to criteria |
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| Technical Background (* indicates a Philips patent/application) | relevant to criteria |

| EP385404 | (1) | abstract |
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| <u>US 5226152</u> | (2) | abstract |
| <u>US 5291528</u> | (3) | abstract |
| <u>US 5946362</u> | (4) | abstract |
| <u>US 6343334</u> | (5) | abstract |

- 1. Clock failure recovery in a processing system.
- 2. Watchdog timer for detecting an error condition for non-responding processors.
- 3. Glitch-free switching of asynchronous clock sources.
- 4. Clock failure detection in a synchronous system by measuring intervals between clock pulses.
- 5. Use of a watchdog timer to detect the stopping of a clock oscillation